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TECH CENTER 1600/2900

PATENT

Docket No.: 114232.107 stomer No. 21269

> IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Patent Application of

Leland Shapiro

Serial No.: 09/518,098

Filed: March 3, 2000

Group Art Unit: 1653

Examiner: D. Lukton

For:

INHIBITORS OF SERINE PROTEASE ACTIVITY, METHODS AND COMPOSITIONS FOR TREATMENT OF VIRAL INFECTIONS

RESPONSE TO RESTRICTION REQUIREMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In response to the Office Action mailed April 24, 2001, Paper No. 5, please amend the aboveidentified application as follows:

IN THE SPECIFICATION:

Page 2, please delete the first full paragraph and replace it with the following new

paragraph:

AAT is a glycoprotein of MW 51,000 with 394 amino acids and 3 oligosaccharide side chains. Human AAT was named anti-trypsin because of its initially discovered ability to inactivate pancreatic trypsin. Human AAT is a single polypeptide chain with no internal disulfide bonds and only a single cysteine residue normally intermolecularly disulfide-linked to either cysteine or glutathione. The reactive site at position 358 of AAT contains a methionine residue, which is labile to oxidation upon exposure to tobacco smoke or other oxidizing pollutants. Such oxidation may reduce the biological activity of AAT; therefore substitution of another amino acid at that position,

